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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	
First Inventor	RAJA SINGH TULI
Title	
Express Mail Label No.	

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

1. [X] Fee Transmittal Form (e.g., PTO/SB/17) *(Submit an original and a duplicate for fee processing)*
2. [X] Applicant claims small entity status. See 37 CFR 1.27.
3. [X] Specification [Total Pages [44]] *(preferred arrangement set forth below)*
   - Descriptive title of the invention
   - Cross Reference to Related Applications
   - Statement Regarding Fed sponsored R & D
   - Reference to sequence listing, a table, or a computer program listing appendix
   - Background of the Invention
   - Brief Summary of the Invention
   - Brief Description of the Drawings *(if filed)*
   - Detailed Description
   - Claim(s)
   - Abstract of the Disclosure
4. [X] Drawing(s) *(35 U.S.C. 113)* [Total Sheets [4]]
5. Oath or Declaration [Total Pages [2]]
   a. [X] Newly executed (original or copy)
   b. [ ] Copy from a prior application (37 CFR 1.63 (d)) *(for continuation/divisional with Box 17 completed)*
      i. [ ] DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1 63(d)(2) and 1 33(b).
6. [ ] Application Data Sheet See 37 CFR 1 76
7. [ ] CD-ROM or CD-R in duplicate, large table or Computer Program *(Appendix)*
8. Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all necessary)*
   a. [ ] Computer Readable Form (CRF)
   b. Specification Sequence Listing on:
      i [ ] CD-ROM or CD-R (2 copies); or
      ii [ ] paper
   c [ ] Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. [ ] Assignment Papers (cover sheet & document(s))
10. [ ] 37 CFR 3.73(b) Statement *(when there is an assignee)* [ ] Power of Attorney
11. [ ] English Translation Document *(if applicable)*
12. [ ] Information Disclosure Statement (IDS)/PTO-1449 [ ] Copies of IDS Citations
13. [ ] Preliminary Amendment
14. [ ] Return Receipt Postcard (MPEP 503) *(Should be specifically itemized)*
15. [ ] Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
16. [ ] Other: ....

17. If a CONTINUING APPLICATION, *check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:*

[ ] Continuation [ ] Divisional [ ] Continuation-in-part (CIP) of prior application No _____/_____

Prior application information Examiner _____ Group / Art Unit _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

18. CORRESPONDENCE ADDRESS

[ ] *Customer Number or Bar Code Label* *(Insert Customer No. or Attach bar code label here)* or [X] *Correspondence address below*

Name	RAJA SINGH TULI				
Address	1155 RENE LEVESQUE WEST				
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Country	CANADA	Telephone	514 871 0984	Fax	514 871 3864

Name (Print/Type)	RAJA SINGH TULI	Registration No. (Attorney/Agent)	
Signature		Date	24 OCT, 2000

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FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision

TOTAL AMOUNT OF PAYMENT ($) 355.-

Complete if Known	
Application Number	
Filing Date	
First Named Inventor	RAJA SINGH TULI
Examiner Name	
Group Art Unit	
Attorney Docket No.	

METHOD OF PAYMENT

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:
   Deposit Account Number
   Deposit Account Name
   ☐ Charge Any Additional Fee Required Under 37 CFR 1 16 and 1 17
   ☒ Applicant claims small entity status See 37 CFR 1.27

2. ☒ **Payment Enclosed:**
   ☒ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
101	710	201	355	Utility filing fee	355
106	320	206	160	Design filing fee	
107	490	207	245	Plant filing fee	
108	710	208	355	Reissue filing fee	
114	150	214	75	Provisional filing fee	

SUBTOTAL (1) ($) 355.-

2. EXTRA CLAIM FEES

	Extra Claims		Fee from below	Fee Paid
Total Claims	1	-20** =	X	=
Independent Claims	1	- 3** =	X	=
Multiple Dependent				=

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description
103	18	203	9	Claims in excess of 20
102	80	202	40	Independent claims in excess of 3
104	270	204	135	Multiple dependent claim, if not paid
109	80	209	40	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($) 0

**or number previously paid, if greater, For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for *ex parte* reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	390	216	195	Extension for reply within second month	
117	890	217	445	Extension for reply within third month	
118	1,390	218	695	Extension for reply within fourth month	
128	1,890	228	945	Extension for reply within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,240	241	620	Petition to revive - unintentional	
142	1,240	242	620	Utility issue fee (or reissue)	
143	440	243	220	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Petitions related to provisional applications	
126	240	126	240	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	710	246	355	Filing a submission after final rejection (37 CFR § 1 129(a))	
149	710	249	355	For each additional invention to be examined (37 CFR § 1 129(b))	
179	710	279	355	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) ($) 0

SUBMITTED BY				Complete (if applicable)	
Name (Print/Type)	RAJA SINGH TULI	Registration No. (Attorney/Agent)		Telephone	514 871 0984
Signature				Date	24 OCT, 2000

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PORTABLE HIGH SPEED COMMUNICATION DEVICE PERIPHERAL CONNECTIVITY

BACKGROUND OF THE INVENTION

Field of the Invention

The invention relates to a Host Computer system, which receives information, rasterizes it, compresses it, and transmits it to a remote portable device or Personal Computer (PC) system, which decompresses the image to display it on a screen. The result is a cost effective Internet access solution which allows interaction between the device and a Host Computer. It is a further aim of the present invention, to provide connectivity to a variety of Peripheral Devices, such as printers, scanners, etc. The user will also be able to interface with a wide variety of peripheral devices at remote locations without the need for peripheral device driver software installed at the remote location.

Description of the Prior Art

The background of the present invention includes US Patent # 5925103, Internet Access Device, which describes an improved Internet access system, vastly different from the present invention. Other prior art would include palm top computers, hand-held computers and cellular telephones that have limited processing power due to design restrictions. Thus, these computers are much slower for accessing the Internet and World Wide Web. Most prior art does not allow the user to scan and print to a wide variety of peripheral devices from remote locations, without the need for associated software installed in the portable device, as in the present invention.

SUMMARY OF THE INVENTION

The present invention relates to a portable high speed Internet access device that can access the Internet and World Wide Web as a wireless device, and also interface with a variety of peripheral devices remotely.

Prior Art has a Web server connected to the Internet. This server contains a virtual browser which takes the image displayed in the browser and converts this image into a bit map which is compressed, and communicates via telephone lines to a cellular telephone. The cellular telephone is connected to the high speed internet access device of the invention commonly referred to as a PDA (Personal Digital Assistant) which is comprised of a display screen, battery and related micro-electronics. This enables the PDA to receive, decompress and view the bit map image sent from the virtual browser, and more importantly, through cellular phone connectivity to be able to input data from the PDA directly onto the server. The PDA and cellular phone combination may be replaced by another computer outfitted with a modem. In particular, the Host Computer or server receives vector information or compressed data in the form of HTML, JPEG, etc., which is displayed on a web page. The virtual browser virtually displays a virtual image on the server. That image, in whole or parts, is recompressed and sent to the PDA. The recompressed data format sent to the PDA, is not necessarily in the same format as the compressed data format first received by the server. Another embodiment involves the server receiving vector information such as HTML or text and then rasterizing it to bit map format. It can then shown in memory through the virtual browser and is recompressed through a "loss less" method and sent to the PDA.

Prior Art also comprises the PDA with an electronic touch screen keyboard, which remains invisible and only appears on a portion of the display screen when called upon by touching the keyboard icon. The entire display screen is covered with a transparent touch panel, which is essentially a matrix array of electrodes, which can detect the location of any pressure points applied to it.

In accordance with the present invention, the Host Computer, which contains an operating system such as Windows NT, has a variety of printer driver software installed to enable printing from specific types of printers via a parallel port, serial port, USB port, or other types of ports. Hence, when a print command is executed, data is sent from the printer driver software to the selected port and is intercepted by another software unit, which may compress the data and subsequently diverts it to the portable device via modem. The particular type of printer dedicated to the printer driver software in the Host Computer is connected to the remote PDA or computer, and the data received may be decompressed if necessary by the remote PDA or computer and sent to the corresponding port. The printer connected to this port would print normally from the portable device using its standard protocol as if it were connected directly to the Host Computer. This same principle is applied to all other peripheral devices that may be connected to standard ports on a computer, whereby the peripheral's driver software is installed directly on the Host Computer. This method allows the user to interface with a wide variety of peripheral devices at remote locations without the need for peripheral device driver software installed at the remote location.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention is described in more detail below with respect to an illustrative embodiment shown in the accompanying drawings in which:

Fig. 1 illustrates elements in the Host Computer, which communicates with a remote user and the device of the invention.

Fig. 2 illustrates the image to be displayed compared with the displayable area of a browser window.

Fig. 3 shows a typical subdivision of the virtual image to be displayed.

Fig. 4 illustrates file formats received and sent by the Host Computer.

Fig. 5 illustrates the displayable area of the device with respect to portions of the virtual image, which are sequentially decompressed prior to viewing.

Fig. 6 illustrates the portable device of the present invention enabling the user to operate peripheral devices through a standard port or other ports.

Fig. 7 illustrates a computer connected to a modem of the present invention enabling the user to operate peripheral devices through a standard port or other ports.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

To facilitate description, any numeral identifying an element in one figure will represent the same element in any other figure.

The principal embodiment of the present invention aims to provide a portable device that allows a user to access the Internet or the World Wide Web (WWW), which is a device similar to a palm top computer. It is an aim of the present invention, to offer a cost-competitive device. It is a further aim of the present invention to allow the user to interface with a wide variety of peripheral devices at remote locations, without the need for peripheral device driver software installed at the remote location.

Currently, existing palm top devices such as the Palm Pilot VII and Windows CE type devices contain an operating system, and within the operating system a mini-browser to interpret information received from the WWW or Internet and then display this information on the screen. This requires a powerful microprocessor, which is not advantageous in conserving power for portable applications and also minimizing costs.

A general description of the Prior Art is disclosed in **Fig. 1** with further reference to Patent Applications 09/496,172, 09/501,585, 09/504,809, 09/504,808, and 09/504,807. A Host Computer **1** is depicted which is connected to the Internet, and that host may also be a Web server. Running in the Host Computer, is a Web server program **2**. When a remote user **3** requests to view a Web page (or electronic message etc.) the Web server software receives HTML, JAVA, or other types of information and transmits this information to another software, the Browser Translator **4**. This software translates the information, (i.e. the entire

image comprising graphics and text) received in the form of HTML, Java, etc. (as information may be gathered from different sources) and translates it to a black and white bit map or raster image. In another embodiment, the software translates the information into a raster or color image. The image **5**, as shown in **Fig. 2,** contains the information that would normally be displayed on a single Web page. The translation program therefore, also acts as a virtual browser. As can be seen in **Fig. 2**, the image **5** to be displayed in a browser window **6** is usually larger than the displayable area of the browser window **6**. The cellular telephone **12** of **Fig. 1** is connected to the high speed internet access device **18** of the invention commonly referred to as a PDA (Personal Digital Assistant) which is comprised of a display screen **19**, battery and related micro-electronics. This enables the PDA to receive, decompress and view the bit map image sent from the virtual browser **6**, and more importantly, through cellular phone connectivity to be able to input data from the PDA directly onto the server. In particular, the Host Computer or server receives vector information or compressed data in the form of HTML, JPEG, etc., which is displayed on a web page. The virtual browser virtually displays a virtual image on the server. That image, in whole or parts, is recompressed and sent to the PDA. The recompressed data format sent to the PDA, is not necessarily in the same format as the compressed data format first received by the server, as illustrated in **Fig. 4**. For example, the incoming data from a Web page may be in the form of JPEG which is decompressed and displayed on the virtual browser. This data is recompressed and sent to the PDA but can be in the form of TIFF G4 or other formats, and not necessarily JPEG as initially received.

Another embodiment involves the server receiving vector information such as HTML or text and then rasterizing it to bit map format. It can then

shown in memory through the virtual browser and is recompressed through a "loss less" method and sent to the PDA.

The image **5** of **Fig. 2** is further divided into sections **7, 8, 9,** and **10,** as shown in Prior Art of **Fig. 3**. The image is divided after the bitmap or raster is created. The reason for the division (as will be explained later) is for the purpose of display priority on the user's display. The image **5** is then sent to another program **11** running on the Host Computer **1 (Fig. 1)**, which compresses the image using a loss-less compression method. The compression method may be group 3 or group 4, or another method. The programs **4** and **11** can have multiple instances running simultaneously on the host server for the purpose of connecting to multiple users. The compressed image, after being processed by program **11**, is sent to the user, using a protocol in which information may be broken down into packets.

The information is received by the device **18** of the invention in **Fig. 5** which has the ability to display a monochrome image **20**, in its display window **19.** The information is decompressed and displayed in the order of priority such that part of image **7** of **Fig. 5**, which substantially or completely covers the displayable area **19** of the device, is decompressed and displayed first and then sequentially the portions **8, 9** and **10** of the image are decompressed, and stored in an internal memory of the device to be displayed later when the user scrolls up, down, or sideways to these parts of the image.

In further Prior Art, the information received from the server by the device **18** of the invention in **Fig. 5** remains compressed, and only the area viewed by the device is decompressed, since the area of a web page to be

viewed is larger than the device's display area. As the user scrolls up, down or sideways, only the parts of the image to be displayed are decompressed prior to viewing.

A CPU resident in the device therefore has the ability to decompress a bit map or raster image that may be larger than the size of the display and allow the user to traverse this bit map or raster image. The primary method of traversing the image is through conventional scroll bars positioned at the sides of the image. The resident CPU on the device has no ability to determine which part or parts of the image that are being displayed represent links to other Web pages, etc. Thus, the translator program **4 (Fig. 1)** translates the image in the virtual browser **6** such that the words that represent links on the page **5 (Fig. 2)** are translated to be slightly bolder or underlined. The user may therefore consider text that is bold or underlined to be links.

In accordance with **Fig. 6** of the present invention, the Host Computer **1**, contains an operating system **20** such as Windows NT, and has a variety of peripheral driver software **21** installed, to enable operation of these peripheral devices via a standard port **22**, which may be a parallel port, serial port, USB port, or other types of ports. The present invention allows the user to interface the portable device **18** with a variety of peripheral devices **24** through a similar port **23** which may be the same as the standard port **22** or a compact version, or a wireless interface. For demonstration purposes, the peripheral device **24** will be a printer connected to port **23** on the portable device. Hence, when a user wishes to print a viewed document on the portable device, a print command is executed by the portable device **18**, and a print message is sent to the Host Computer **1**, which instructs the Host Computer that a print command

has been executed by the portable device. The Host Computer **1** initiates the printer driver software **21**, which brings up a window displaying various print options for the user to make selections. An image of this window is sent from the Host Computer **1** to the portable device **18** to be displayed on its screen. The user would then click on various parts of the image on the display screen and a message is sent each time to the Host Computer informing of the click locations, and the Host Computer would input these clicks in the identical corresponding locations on its window of the printer driver's displayed print options. Any changes made to the display of this window on the Host Computer as a result of these instructions would result in a refreshed image of this window being sent to the portable device **18** to be displayed on its screen. When the user is satisfied with the print options selected and clicks on the "OK" icon on the screen of the portable device **18**, a message is sent to the Host computer which enters "OK" in the identical corresponding location on its window of the printer driver's displayed print options. The print option window disappears and a refreshed image of the document appears on the screen of the Host Computer, and an image of this is sent to the portable device to be displayed. The application program running in the Host Computer **1** sends the data to be printed to the printer driver software **21**, which transforms this data to a language the printer can understand. Hence, this data to be printed is then sent by the printer driver software **21** to the port **22** on the Host Computer **1**, which supports two-way communication with any printer connected to port **22**, but this data transfer is intercepted by software **25** which diverts it to the port **23** on the portable device **18**. The software **25** basically transports the port **22** on the Host Computer **1** to the port **23** on the portable device **18**, so that the printer driver software **21** believes it is communicating with port **22** on the Host Computer **1**, whereas it is actually communicating with port **23** on the portable device **18**. The software **25**

interacts with another software **29** in the portable device **18**, to support a two-way communication between the port **23** and the printer **24** as data is transferred back and forth between the printer driver **21** and the printer **24**.

In another embodiment of the invention, the print command is executed by the user **3** of **Fig. 6**, from the portable device **18**. A print icon is selected from the display screen of the portable device, and the location of the selected print icon on the display screen is sent as a message to the Host Computer **1**, which has a mapped layout of the portable devices' display screen and determines that a print command has been executed. The Host Computer **1** initiates the printer driver software **21**, which brings up a window displaying various print options for the user to make selections. An image of this window is sent from the Host Computer **1** to the portable device **18** to be displayed on its screen. The user would then click on various parts of the image on the display screen and a message is sent each time to the Host Computer informing of the click locations, and the Host Computer would input these clicks in the identical corresponding locations on its window of the printer driver's displayed print options. Any changes made to the display of this window on the Host Computer as a result of these instructions would result in a refreshed image of this window being sent to the portable device **18** to be displayed on its screen. When the user is satisfied with the print options selected and clicks on the "OK" icon on the screen of the portable device **18**, a message is sent to the Host computer which enters "OK" in the identical corresponding location on its window of the printer driver's displayed print options. The print option window disappears and a refreshed image of the document appears on the screen of the Host Computer, and an image of this is sent to the portable device to be displayed. The application program running in the Host Computer **1** sends the data to be printed to the printer driver software **21**,

which transforms this data to a language the printer can understand. Hence, this data to be printed is then sent by the printer driver software **21** to the port **22** on the Host Computer **1**, which supports two-way communication with any printer connected to port **22**, but this data transfer is intercepted by software **25** which diverts it to the port **23** on the portable device **18**. The software **25** basically transports the port **22** on the Host Computer **1** to the port **23** on the portable device **18**, so that the printer driver software **21** believes it is communicating with port **22** on the Host Computer **1**, whereas it is actually communicating with port **23** on the portable device **18**. The software **25** interacts with another software **29** in the portable device **18**, to support a two-way communication between the port **23** and the printer **24** as data is transferred back and forth between the printer driver **21** and the printer **24**.

In another embodiment of the invention, in accordance with **Fig. 7**, the portable device may be another computer **27** connected to a dedicated modem **28**, which receives data from the modem **26** on the Host Computer **1**. The computer **27** is a simple terminal with no operating system running in it, similar to the portable device **18**. This embodiment allows the user to interface the computer **27** with a variety of peripheral devices **24** through a similar port **23** which may be the same as the standard port **22** or a compact version, or a wireless interface. For demonstration purposes, the peripheral device **24** will be a printer connected to port **23** on the computer **27**. Hence, when a user wishes to print a viewed document on the computer **27**, a print command is executed by the computer **27**, and a print message is sent to the Host Computer **1**, which instructs the Host Computer that a print command has been executed by the computer **27**. The Host Computer **1** initiates the printer driver software **21**, which brings up a window displaying various print options for the user to make

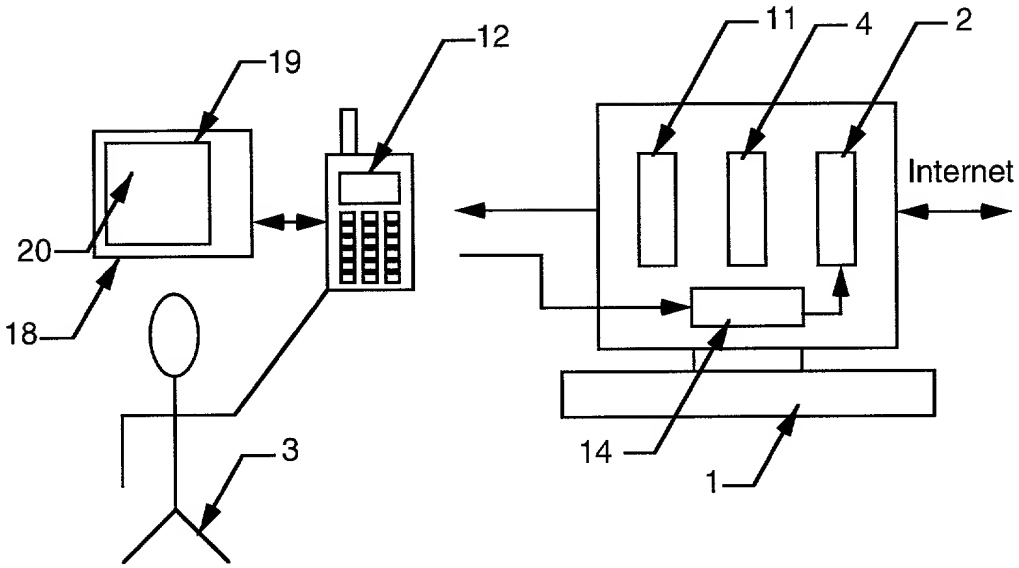
selections. An image of this window is sent from the Host Computer **1** to the computer **27** to be displayed on its screen. The user would then click on various parts of the image on the display screen and a message is sent each time to the Host Computer informing of the click locations, and the Host Computer would input these clicks in the identical corresponding locations on its window of the printer driver's displayed print options. Any changes made to the display of this window on the Host Computer as a result of these instructions would result in a refreshed image of this window being sent to the computer **27** to be displayed on its screen. When the user is satisfied with the print options selected and clicks on the "OK" icon on the screen of the computer **27**, a message is sent to the Host computer which enters "OK" in the identical corresponding location on its window of the printer driver's displayed print options. The print option window disappears and a refreshed image of the document appears on the screen of the Host Computer, and an image of this is sent to the computer **27** to be displayed. The application program running in the Host Computer **1** sends the data to be printed to the printer driver software **21**, which transforms this data to a language the printer can understand. Hence, this data to be printed is then sent by the printer driver software **21** to the port **22** on the Host Computer **1**, which supports two-way communication with any printer connected to port **22**, but this data transfer is intercepted by software **25** which diverts it to the port **23** on computer **27**. The software **25** basically transports the port **22** on the Host Computer **1** to the port **23** on the computer **27**, so that the printer driver software **21** believes it is communicating with port **22** on the Host Computer **1**, whereas it is actually communicating with port **23** on the computer **27**. The software **25** interacts with another software **29** in the computer **27**, to support a two-way communication between the port **23** and the printer **24** as data is transferred back and forth between the printer driver **21** and the printer **24**.

I claim:

1. A Host Computer system that directs information to software associated with a peripheral device, which modifies this information to be recognized by the peripheral device, and transmits it to a connecting port capable of interfacing with the peripheral device, to be intercepted by another software unit which diverts it to a remote device, that directs it to the peripheral device connected to same remote device, such that a two way communication channel is provided between the Host Computer and the peripheral device to allow data to be sent between them.

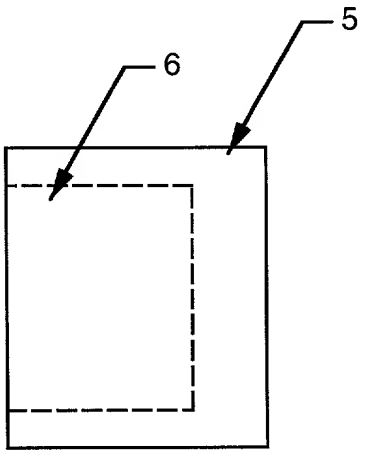
ABSTRACT

The invention relates to a Host Computer system, which receives information from the Internet, rasterizes it, compresses it and transmits it to a portable device which decompresses the image to display it on a screen. The Host Computer may also transmit to another computer outfitted with a modem. The Host Computer which contains an operating system, has a variety of peripheral device driver software installed to enable interacting with these peripheral devices via a parallel port, serial port, USB port, or other types of ports. Hence, when a peripheral device related command is executed, data is sent from the peripheral device driver software to the selected port on the Host Computer and is intercepted by another software unit, which may compress this data and subsequently diverts it to the portable device via modem. The particular type of peripheral device dedicated to the peripheral device driver software in the Host Computer is connected to the portable device or computer, and the compressed data received is decompressed by the portable device or computer and sent to the corresponding port. This method allows the user to interface with a wide variety of peripheral devices at portable locations without the need for peripheral device driver software installed at the remote location.



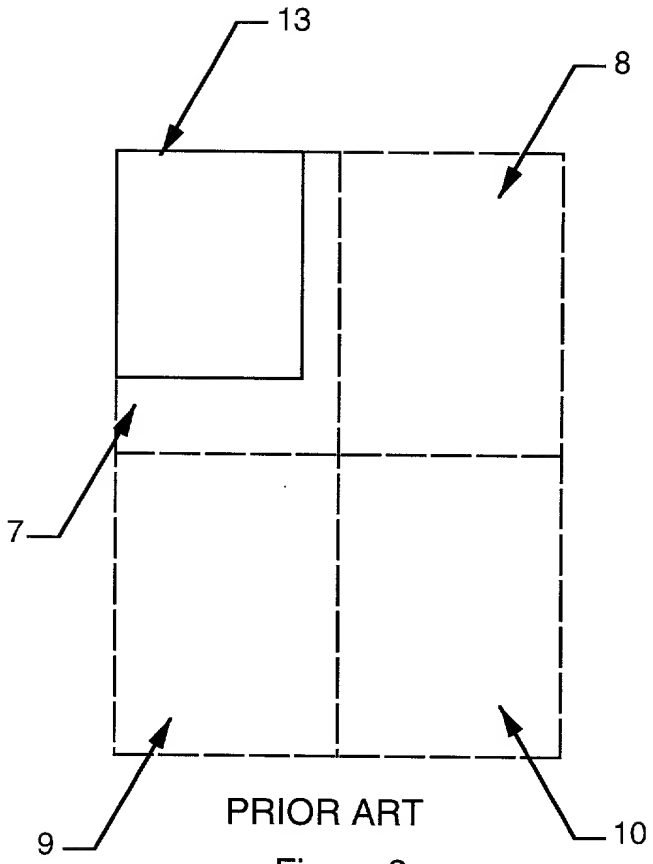
PRIOR ART

Figure 1



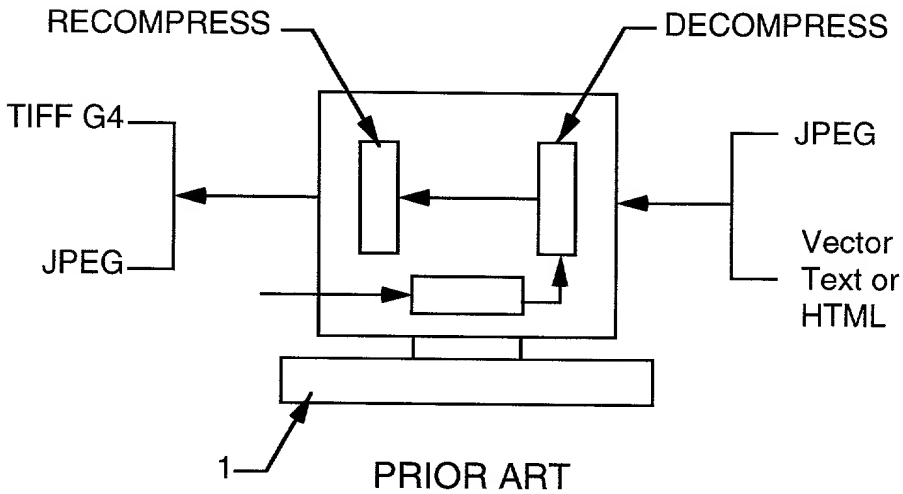
PRIOR ART

Figure 2



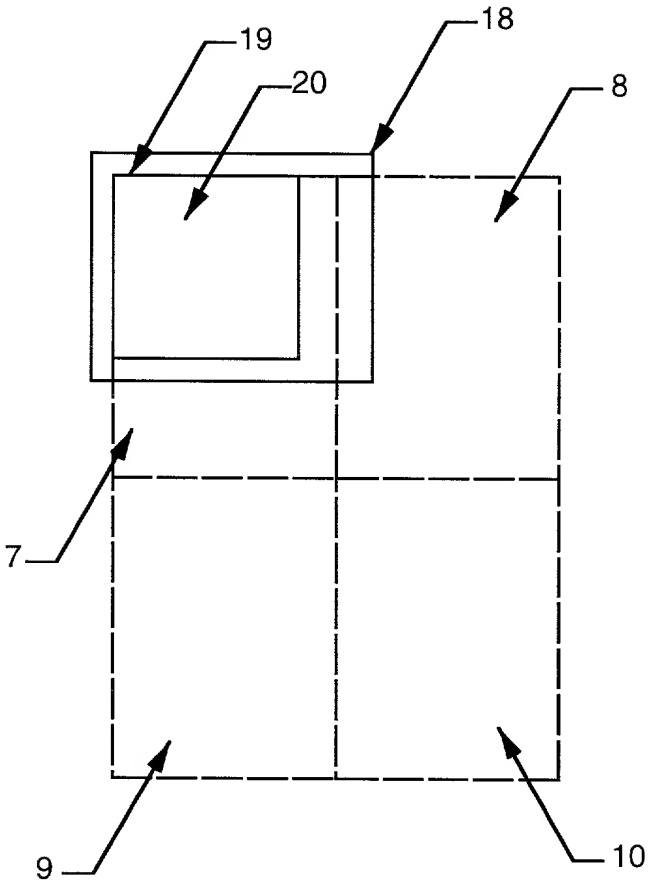
PRIOR ART

Figure 3



PRIOR ART

Figure 4



PRIOR ART

Figure 5

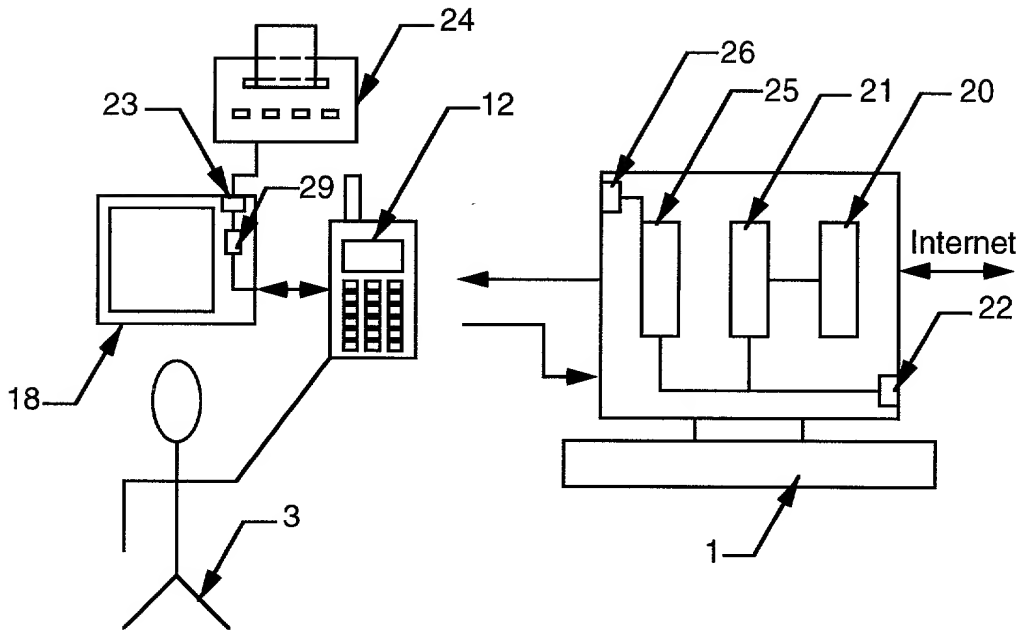


Figure 6

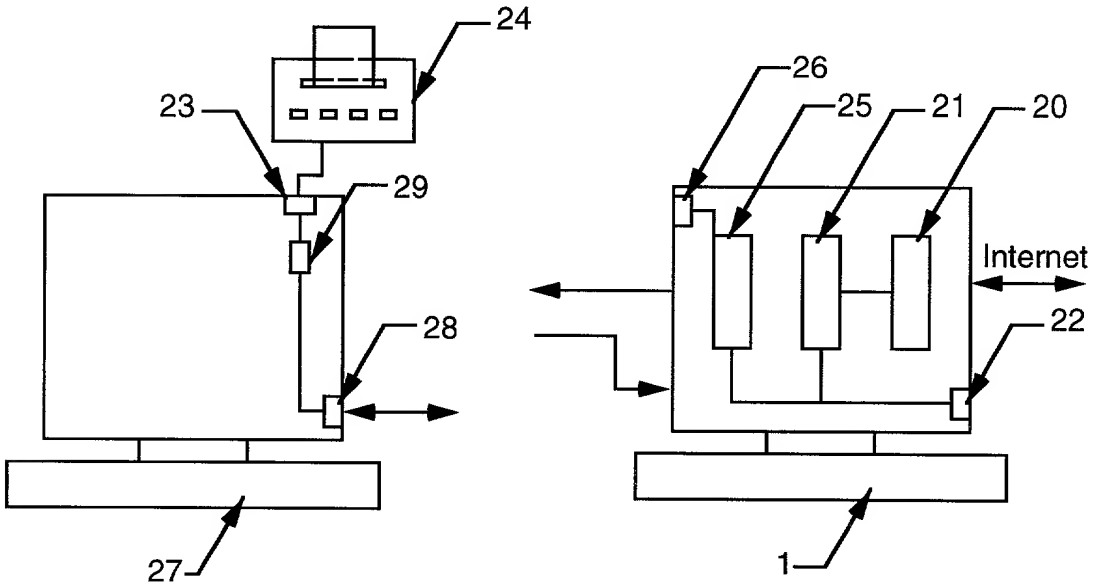


Figure 7

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DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

☒ Declaration Submitted with Initial Filing **OR** ☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number	
First Named Inventor	RAJA SINGH TULI
COMPLETE IF KNOWN	
Application Number	/
Filing Date	
Group Art Unit	
Examiner Name	

As a below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

PORTABLE HIGH SPEED COMMUNICATION DEVICE PERIPHERAL CONNECTIVITY

(Title of the Invention)

the specification of which

☒ is attached hereto

OR

☐ was filed on (MM/DD/YYYY) ☐ as United States Application Number or PCT International Application Number ☐ (if applicable) and was amended on (MM/DD/YYYY) ☐

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U S C 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or any PCT international application having a filing date before that of the application on which priority is claimed

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached? YES	NO
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)

☐ Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

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DECLARATION — Utility or Design Patent Application

Direct all correspondence to: ☐ Customer Number or Bar Code Label [ ] OR [X] Correspondence address below

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR : ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any])	RAJA SINGH	Family Name or Surname	TULI
Inventor's Signature	Raja	Date	24 OCT, 2000
Residence: City	MONTREAL	State QUEBEC / Country CANADA	Citizenship CANADIAN
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City	MONTREAL	State QUEBEC / ZIP H3B 3T6	Country CANADA

NAME OF SECOND INVENTOR: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	ZIP	Country

☐ Additional inventors are being named on the ____supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto